Page 1

December-19-12 1:20:37 PM Accept D3391-021 Setup Start Item ID: *N900040100* **Revision ID:** Fwd Tube Assembly Item Name: Start Qty: 1.00 Cust Item ID: 12/31/12 **Start Date:** Req'd Qty: 1.00 Required Date: 1/18/13 Customer: Reference: Date: 13-01-2 Tooling: Approvals: Date: SPC (Y/N): Date: QC: Tool ID Tool # Plan Accept Reject Reject Insp. Sequence ID/ Set Up/ Operation Qty Number Stamp Code **Qty** Description **Run Hours** Work Center ID Draw Nbr **Revision Nbr** D3391 0.00 100 - De 13/06/25 Skidtubes *100* Skidtubes Memo Cut extrusion to 46.52 +0.010 -0.020 Skidtubes - De 13/06/25 110 **BENDING MACHINE - SKIDTUBES** *110* 0.00 CNC Bend 1 Memo CNC Delta 100 Bender Bend as per Dwg D3391 Using Bend Prog 3391021 QC5- Inspect part completeness to step on W/O 0.00 120 *120* QC 0.00 Memo Quality Control H-6.68

NCR:	Voc	1	No
NCK:	Yes	/	No

WORK ORDER NON-CONFORMANCE / UPDATE

DQ		te:
QA Close	ed: Dat	te:
DEPARTMEI	NT/PROCESS	
	Water Jet Prod. Eng. Coor. tore/Packaging Supplier	Engineering Quality Other
Sign & Date	Verification	n QC Inspector

		_									QA Closed:	Date	e:
Work Ord	er.					DISPOSITION				AGAINST DI	PARTMENT	/PROCESS	
Part f	- . No.					Rework Scrap Use-as-is Work Order Update			Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update		nitial	Act	tion	Sign &		*
Cause		Date	Step	Qty	(or Non-conformance	Ch	ief Eng	Desci	ription	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling													
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Material	Ш		İ			•							
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Supplier										1			
Training	Ц		 										
Unapproved	Ш		İ										
							AUL	T CATE	GORY		· · · ·		
Landi						General		۱		<u></u>	٦	Г	
	$\boldsymbol{\vdash}$	Bending				Bend	\vdash	Grain		-	Ovalized		Pressure/Forced
	⊢⊣	Centre No	ot Concer	ntric to	O/S	BOM/Route	\vdash	Hardwa		_	Over/Under) -	Temperature/Cure
	$\boldsymbol{\vdash}$	Cracks				Broken/Damaged	\vdash	,	on Incomplete	⊢	Part Incorre	├ -	Weld
					-	Burrs			ions Incomplete/l	Unclear	Part Lost/Mi	issing [Wrong Stock Pulled
	Cuffs				_	Contamination	\vdash	Mainte		-	Part Moved	.	
	├ ─-					Countersink	\vdash	Mislabe		<u> </u>	Positioned V		Other
					-	Cut Too Short	\vdash	Misreac Offset	1	<u>L</u>	Power Loss/	onige [Tottlet
	F-1				Drill Holes Drawing	-		alibration					
					٠	Drawing · · · Finish	Out of Calibration						
	Turning Sequence					Folio	Out of Sequence Outside Dimensions						
	Wave/Twist in Tube					ווט ון	Carsiae	PHILEHOLIO					

December-19-12 1:20:37 PM

Revision ID:	D3391-021			Accept	*N900	<u>040</u>	100)* s	etup Star Stop	Į VI	S1*
Item Name: Start Date: Required Date: Reference:	Fwd Tube Ass 12/31/12 1/18/13	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item :	ID:			•	"IN	S2*
	Duo acca Dia		Data	Tooling:		ate:	_	R	tun Star	^t *N	R1*
Approvals:		an:	. , ,			ate:			Stop	*N	R2*
Sequence ID/ Work Center II)	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
*130 *130* HAAS 1 HAAS CNC vertical	machine #1		as per Folio FA590 & Dwg D3391 Rev	0.00	Sd 13-	-06-29			Ð		
140		QC2- Inspect parts off m	achine FAI/FAIB	0.00							
140 QC Quality Control		Memo		0.00	S\$13-00	6-29			B		
150 *150* Mill Conv Conventional Millin	ng Machine	CONVENTIONAL MIL Memo	LING MACHINE t cap as per Dwg D3391	0.00 0.00	D 13-7-1	9			***************************************		

										DQA:	Date:		
NCR:	Yes / I	Vo			WORK ORDER NON-O	100	NFOR	MANCE / UPD	ATE	·		3.	
										QA Closed:	Date:		
Work Ord	or:				DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
Work Ord	er				Rework	7		Skid-tube	Crosstube	}	Water Jet	Engineering	
Part I	No				Scrap	1	l ,	Machining Machining	Small Fab	Pro	d. Eng. Coor.	Quality	
, are					Use-as-is	1		noforming	Finishing	4	e/Packaging	Other	
NCR I	No				Work Order Update]		· · ·	Composite		Supplier		
Root					ption of work order update		Initial	Actio		Sign &			
Cause	Da	te Step	Qty		or Non-conformance	Ch	nief Eng	Descrip	otion	Date	Verification	QC Inspector	
Doc/Data													
Equip/Tooling	Ш												
Operator	Ш			<u> </u>	•								
Material	Ш												
Setup	Ы	'									:		
Other	Щ					ŀ							
Process	Ш					ł							
Supplier	\square					ŀ							
Training	\square					ļ							
Unapproved			<u> </u>			<u>L.</u>				l			
						AUL	LT CATE	GORY					
Landi	ng Gear				General	_	1 ₆ .			1		7 /s	
	Bend	_		_	Bend	-	Grain		<u> </u>	Ovalized		Pressure/Forced	
		e Not Conce	ntric to	O/S	BOM/Route	<u> </u>	Hardwa		_	Over/Under	 	Temperature/Cure	
	Crack	-		<u> </u>	Broken/Damaged	<u> </u>	-1	ion Incomplete	. -	Part Incorred		Weld	
		ed/Crimped	-		Burrs	_	4	ions Incomplete/Un	clear	Part Lost/Missing Wrong Stock Puller			
	Cuffs				Contamination	<u></u>	4				Part Moved		
Heat Treat				Countersink Mislabeled					Positioned Wrong				

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Power Loss/Surge

Other

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

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Memo

94628

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Quality Control

December-19-12	? 1:20:37 PN	1										
Item ID: Revision ID:	D3391-021			Accept	*N900	040	100) *	Setup	Start	*N	S1*
Item Name:	Fwd Tube Ass	sembly								Stop	*N	S2*
Start Date:	12/31/12	Start Qty: 1.00	*1*		Cust Item I	D:			٠.,.			
Required Date:	1/18/13	Req'd Qty: 1.00	*1*		Customer:							
Reference:												
Approvals:	Process Pla	an:	Date:	Tooling:	Da	ite:	_]		Start	*N	R1*
••	QC:		Date:	SPC (Y/N):	Da	te:				Stop	*N	R2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reje Qty		Reject Number	Insp. Stamp
160		QC2- Inspect parts off m	achine FAI/FAIB	0.00							•	
160 QC Quality Control		Memo		0.00	13-7-19			L				
170		QC8- Inspect parts - seco	and check	0.00				_				-100
170				O'A'	13/07/27) 		1				



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NCR:	Yes	1	No
INCIA.	163	,	INU

WORK ORDER NON-CONFORMANCE / UPDATE

DQA:	Date:	,

	, , , , , ,		,	1						QA Closed:	Date:	
Work Orde	er:				DISPOSITION			·	AGAINST	DEPARTMENT	/PROCESS	
				,,	Rework			Skid-tube	Crosstube	—	Water Jet	Engineering Quality
Part N	NO				Scrap	┤ │ _→ ͺ		1achining oforming	Small Fab Finishing		d. Eng. Coor. re/Packaging	Other
NCR N	lo.		Lir,	.	Use-as-is Work Order Update	┤ 		arge Fab	Composite		Supplier	
TTCK TT					Work order opadie	.	•					
Root				Descri	ption of work order update.	Iņitia	al	Ad	ction	Sign &		. 14 7
Cause	Date	Step	Qty	(or Non-conformance	Chief	Eng	Desc	cription	Date	Verification	QC Inspector
Doc/Data											÷,	
Equip/Tooling Operator	i i		3			,				.90	:•	.,
Material	۲ ،										, ,	
Setup	-					,					•	
Other				·		-					P	•
Process												
Supplier												,
Training												
Unapproved												
					F.	AULT C	ATEG	ORY				
Landin	ng Gear	•			General					_	_	- · ·-
1	Bending				Bend	Gra		•		Ovalized	·	Pressure/Forced
· .	Centre N	ot Concer	ntric to (o/s	BOM/Route	-	rdwar			Over/Under	 	Temperature/Cure
	Cracks				Broken/Damaged	—	•	n Incomplete		Part Incorre	 	Weld
	Crushed/	Crimped.		-	Burrs	_		ons Incomplete,	/Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled
-	Cuffs			•	Contamination			nance		Part Moved		
	Heat Trea			_	Countersink	⊢	slabel	ed		Positioned V		, 7 ₋ .
	Inspectio	,	Tube	<u> </u>	Cut Too Short		sread			Power Loss/	Surge	Other
	Ripples in			<u> </u>	Drill Holes		set •					
	Torque W		xtrusio	ո	Drawing	<u> </u>		alibration				
1	Turning S			<u> </u>	Finish	-		equence				
	Wave/Twist in Tube Folio Outside Dimens						Outside Dimensions					

December-19-12				*946				Page			
Item ID: Revision ID:	D3391-021			*N900040100						rt *N	S1*
Item Name: Start Date: Required Date: Reference:	12/31/12	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*	•	Cust Item Customer:					·	5 /
Approvals:	Process Pla	nn:	Date:	Tooling:	D)ate:		R	un Sta Sto	171	R1*
7	QC:		Date:	SPC (Y/N):	D	ate:			510	* *N	R2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours 0.00	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	,	Skidtubes		0.00							
Skidtubes Skidtubes		holes drilled 2-Drill float holes to fini (ONLY DR 3-Open tow 4-Open Tov 5- open floa 6-Deburr & 7-Transfer o	bag holes as per Dwg sh size) ILL HOLES MARKE cap holes to .208" as Ring hole to .640" a t bag holes 0.328" and Scribe Batch number	ow cap using DT 8819 Locat (D3391 using DT8798(Do not) D "A") per Dwg D3391 d counter sink as per dwg D3 Inside aft end.	ot open tow cap J 391	J.D SAC	>	13/10	/7/2,	3	•
190 *190* QC Quality Control		QC5- Inspect part comp			SM) 13/021			J			<u> </u>

										DQA:	Date	:
NCR:	Yes / N	0			WORK ORDER NON-C	CO	NFORI	MANCE / UPI	DATE	QA Closed:	Date	:
Work Ord	er·				DISPOSITION				AGAINST DE	PARTMENT,	/PROCESS	
Part I	No				Rework Scrap Use-as-is Work Order Update	Scrap M Use-as-is Thermo			Skid-tube Crosstube Machining Small Fab hermoforming Finishing Large Fab Composite			Engineering Quality Other
Root				Descri	ption of work order update		Initial	Act	ion	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Cł	nief Eng	Descr	iption	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved												
					 	AUI	LT CATE	GORY			-	
Landi	ng Gear Bendir	g			General Bend		Grain			Ovalized		Pressure/Forced
		Not Conce	entric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged	┕	4	on Incomplete		Part Incorre)	Weld
	H ' ' H				Burrs	<u> </u>	-	ions Incomplete/U	Inclear	Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs				Contamination	$oxed{oxed}$	Mainte		igspace	Part Moved		
	Heat T				Countersink	L	Mislabeled			Positioned V		7
	Inspec	ion Strip in	1 Tube		Cut Too Short		Misread	I		Power Loss/	Surge	Other
i	Ripples in Bend				Drill Holes	Offset						

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

1-instal spacers as per dwg D3391 A/R Magnabond 6398 batch: B125 7/6 exp. date: 12hrs. as per QSI015 2- grind crossbolt flush 3-back drill crossbolt if necessary

Memo

Skidtubes

Skidtubes

0.00

NCR: Ye	es / No				WORK ORDER NON-CONFORMANCE / UPDATE QA Closed: Date:								
)					DISPOSITION				AGAINST DE			······································	
Work Order Part No					Rework Scrap]		Skid-tube Machining	Crosstube Small Fab	Pro	Water Jet d. Eng. Coor.	Engineering Quality	
NCR No					Use-as-is Work Order Update		Therm	noforming Large Fab	Finishing Composite		re/Packaging Supplier	Other	
Root				Descri	ption of work order update	In	nitial	Act	ion	Sign &			
Cause	Date	Step	Qty	C	or Non-conformance	Chi	ef Eng	Descr	iption	Date	Verification	QC Inspector	
Doc/Data		1											
Equip/Tooling													
Operator													
Material													
Setup										:			
Other	_												
Process	_												
Supplier													
Training	_				•								
Jnapproved						1		CORV				<u> </u>	
	- 6					AULI	CATE	JURY					
Landing	-				General Bend		Grain		<u></u>	Ovalized	Γ	Pressure/Forced	
-	Bending Centre No	t Cancar	atria ta O	./s	BOM/Route	\vdash	Ji aiii Hardwa	ro	<u> </u>	Ovalized Over/Under	toloranco	Temperature/Cure	
-	Cracks	it concer	itric to O		Broken/Damaged	\mathbf{H}		on Incomplete	<u></u>	Part Incorre		Weld	
-	Crushed/0	rimped			Burrs	-	-	ions Incomplete/L	Inclear	Part Lost/Mi	-	Wrong Stock Pulled	
⊢	Cuffs	ziinpeu.			Contamination	-	Mainte	•	Ticlear	Part Moved		1 Wrong Stock Fanca	
<u> </u>	Heat Trea	t			Countersink	-	Mislabe		-	Positioned V	Vrong		
<u> </u> -			Tube		Cut Too Short	-	Misread			Power Loss/		Other	
├					Drill Holes	Offset					1		
⊢ ∵ ⊢ −					Drawing	Out of Calibration							
·					Finish	\mathbf{H}	Out of Sequence						

Outside Dimensions

Date:

Wave/Twist in Tube

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Work Orde December-19-12				*94	628*					dicimin i de		Pag	e 6
Revision ID:	D3391-021 Fwd Tube Ass	embly	· · · · · · · · · · · · · · · · · · ·	Accept	*N900	1 040	100)*	Setup	Start Stop	ı Vı .	S1*	•
Start Date: Required Date: Reference:	12/31/12 1/18/13	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item Customer								
Approvals:	Process Pla		Date:	Tooling: SPC (Y/N):		Date:			Run	Start Stop	*N *N	R1* R2*	r c
Sequence ID/ Work Center II 230 *230* QC Quality Control	D	Operation Description QC5- Inspect part comple Memo	eteness to step on W/O	0.00	Tool ID DAS 27 9-89	Tool#	Plan Code	Accept Qty	Qt	y	Reject Number	Insp. Stamp	
235 *235* HandFinish Hand Finishing		Pressure Wash per QSI00 Memo AND REAL	05 4.3 ODINE AS PER QSI 005	0.00				_/_		Ļ	_13-12	-62.	DGI
240 * 240 * 240 Powdercoat		White Gloss(Ref:4.3.5.1)) per QSI005 4.3-Alum <i>M</i> / 26 8 29 .	0.00					9	ð (13-10-1	? <u>. </u>	DAS 34 9-89

Powder Coating

NCR:	Yes	/ No				WORK ORDER NON-	CO	NFORI	MANCE / UPD	DATE			
									•		QA Closed:	Date:	
Work Ord	or.					DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
Part	No.					Rework Scrap Use-as-is			Skid-tube Machining moforming	Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. e/Packaging	Engineering Quality Other
NCR	No.					Work Order Update	╛		Large Fab	Composite		Supplier	
Root						ption of work order update	1	Initial	Acti		Sign &		·
Cause		Date	Step	Qty	(or Non-conformance	Cł	nief Eng	Descri	ption	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved													
							AUI	LT CATE	GORY				
Landi		Bending Centre No Cracks Crushed/G Cuffs Heat Trea Inspection Ripples in	Crimped. It In Strip in Bend	Tube		General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes		Instruct Mainte Mislabe Misreac Offset	ion Incomplete ions Incomplete/U enance eled	nclear	Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned W Power Loss/	st ssing /rong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	ı I	Torque W	aves in E	xtrusior	۱	Drawing	1	[Out of C	Calibration				

Out of Sequence

Outside Dimensions

Date:

DQA:

Turning Sequence

Wave/Twist in Tube

Finish Folio

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2 1:20:38 PM	1									
D3391-021		· · · · · · · · · · · · · · · · · · ·	Accept	*N900	040	100)* s		IV	S1*
Fwd Tube As	sembly							Stop	*N	S2*
12/31/12 : 1/18/13	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item l Customer:	ID:					
		•						Cha w		
Process Pla	an:	Date:	Tooling:	D	ate:		К		171	R1*
QC:		Date:	SPC (Y/N):	D	ate:			Stop	*N	R2*
D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
	QC3- Inspect Part Finish		0.00					,	ο, Ο	1.1.1.
	Memo		0.00				 -x-	4	<u> </u>	14/10113
	Identify as per dwg & Sto	ck Location:	0.00							
	Memo		0.00		. -			·——		
	QC21- Final Inspection -	Work Order Release	0.00							
	Memo		0.00				W.	4-0(-	24	
	D3391-021 Fwd Tube As 12/31/12 : 1/18/13 Process Pla	Fwd Tube Assembly 12/31/12 Start Qty: 1.00 1/18/13 Req'd Qty: 1.00 Process Plan: QC: Operation Description QC3- Inspect Part Finish Memo Identify as per dwg & Sto	Fwd Tube Assembly 12/31/12 Start Qty: 1.00 *1 * : 1/18/13 Req'd Qty: 1.00 *1 * Process Plan: Date: Date: Date: Memo Identify as per dwg & Stock Location: Memo QC21- Final Inspection - Work Order Release	D3391-021	D3391-021	D3391-021	D3391-021	D3391-021	Date Second Sec	Date Set Up Date Set Up Start Star

Closed at of CERAPPED.

								DQA!	Date:	
NCR: Y	es / No				WORK ORDER NON-	CONFORI	MANCE / UPDATE		14/01/2	
								QA Closed:	Date:	14/1/29
Work Orde	r: 99	1678	7		DISPOSITION		AGAINS	T DEPARTMENT	/PROCESS	
Part No	o. <u>D3</u>	39/	-02		Rework Scrap Use-as-is	4 1	Skid-tube Crosstub Machining Small Fa noforming Finishin	b Pro	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other
NCR N	o. <u>14</u> -	-34k	91		Work Order Update] Illen	Large Fab Composit	~ —	Supplier	J Other
Root				Descri	ption of work order update	Initial	Action	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief Eng	Description	Date	Verification	QC Inspector
oc/Data quip/Tooling Derator Material etup Other Process upplier Training	Model	\$0. ₩	×	Pours 4th holi is Drive Allow RC. Too	at essembly that I from Rows sopply sopply the sopply to align.	JAN Profix	PARTS UNABLE TO REWARD PARTS SCRAP + DESTRY	Mals	14-1-2	DAS 16 9-89 (イ(ぁ) / \)
					F	AULT CATE	GORY			
Landing	g Gear				General				_	_
-	Bending Centre No Cracks Crushed/O		ntric to	o/s	Bend BOM/Route Broken/Damaged Burrs Contamination		ion Incomplete ions Incomplete/Unclear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved	ct	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled
	Cuffs Heat Treat				Countersink	Mislabe		Vrong		

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Other

Power Loss/Surge

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Inspection Strip in Tube

Torque Waves in Extrusion

Cut Too Short

Drill Holes

Drawing

Finish

Picklist Print

December-19-12 1:20:37 PM

Work Order ID:

94628

Parent Item:

D3391-021

Parent Item Name:

Fwd Tube Assembly

Start Date: 12/31/12

Required Date: 1/18/13

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP A05.09.13New issue

IPP B06.02.10Dwg rev.D ecn 773 EC IPP C06.05.02Added inspections EC

IPP D 07.03.13 rev F dwg

EC

KJ/JLM

IPP E 07.11.07 revG dwg ecn1053P

EC verified by: DD IPP Rev:f ECN 1056 07-11-12 DD verified by: EC

IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC

IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC

IPP Rev I 09.02.02 added hardware EC verifified by: DD IPP Rev:J 11.11.14 AS PER REV.I

DD verified by:JLM

	DD vermed by ser												
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issuęd	Date Issued	Status
D4095-051 Wearpad Assembly		Manufactured	No				Each	37.0000	ACCTON S	H1	14	,11-7-1	
refu	in 19	<		Location		Loc Qty	Lo	oc Code					
Le for	SHL			FP001		37							
	J'\ L	14006.24		8560	1	3							
				8766	3	10	010	8291		7			
				8854		2	0,10	00.		<u> </u>			
				9305	7	22					, ,		
D6013-047 Skidtube Material		Manufactured	No			100	Each	57.0000		13/0	6/25		
				Location		Loc Qty	<u>L</u> c	oc Code		,			
				LG015	*>	57		•		 .			
				7250	5)	57)			

												DQA	Da	ite:	
NCR:	Yes	/ No					WORK ORDER NON-C	COI	NFOR	MANCE / UP	DATE				•
												QA Closed	: Da	ite:	
							DISPOSITION				AGAINST D	EPARTMEN	r/PROCESS		
Nork Ord	er:						Bassa de L	1		Child Audio C	C		Water Jet	_] [
Part	Nο						Rework Scrap	-	l ,	Skid-tube Machining	Crosstube Small Fab	- Dr.	od. Eng. Coor.	\vdash	Engineering Quality
rait	NO.						Use-as-is	1		noforming	Finishing		ore/Packaging	_	Other
NCR	No.						Work Order Update	1		Large Fab	Composite	- 1100,510	Supplier		
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Root					Desc	crij	ption of work order update	1	Initial	Ac	tion	Sign &			
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		Centre No	t Concer	ntric to (_{o/s}		BOM/Route		Hardwa	re	<u> </u>	Over/Unde	r tolerance	\vdash	Temperature/Cure
		Cracks					Broken/Damaged		i	on Incomplete		Part Incorre			Weld
		Crushed/0	Crimped.		ľ		Burrs		1	ions Incomplete/I	Unclear	Part Lost/M	lissing		Wrong Stock Pulled
		Cuffs	•		Ī		Contamination	_	Mainte	•		Part Moved	1		
		Heat Trea	t		f		Countersink		Mislabe	led		Positioned	Wrong		
		Inspection	Strip in	Tube			Cut Too Short		Misread	1	1	Power Loss	/Surge	Г	Other
		Ripples in	Bend		Ī		Drill Holes		Offset		_				
		Torque W	aves in E	xtrusior	, [Drawing		Out of 0	Calibration					
		Turning Se	equence				Finish		Out of S	equence					

Outside Dimensions

Wave/Twist in Tube

December-19-12 1:20:37 PM

Work Order ID:	94628									
Parent Item:	D3391-021							Start Da	ate: 12/31/12	Required Date: 1/18/13
Parent Item Name:	Fwd Tube Assembly	/						Start Q	Qty: 1.00	Required Qty: 1.00
D3670-4-200		Manufactured	No			220	Each	250.0000	DC/3	4/10/21
SPACER				Location	B102269	Loc Qty		Loc Code	(a)	
				LG001		210				
					78606	2			*****	
					81972	4				
					85460	1				
					87709	177				
					88580	15				
					90510	11				
				LG005		40				
					80360	40				
D3401-041 Tow Cap Assembly		Manufactured	No				Each	28.0000	علا	1 1/10/120
Tow Cap Assembly	to str			Location	1	Loc Qty		Loc Code		
	1030 W	24		FP001		28				
	1 14,000	•			82302	1				
	1				85510	1	13	3103868	x 1	
					86760	16				
					92156	10				
AN960C10L→ washer	NAS1149C0332R	Purchased	No				Each	0.0000	111763	195 (x10) Il 1401-
AN3C4A BOLT		Purchased	No				Each	1,844.0000	Jef	10/01/20
502.				Location	1	Loc Qty		Loc Code		
				FG		20		10 70 77	<u> </u>	
					122814	20	Γ'	1127832	,	
				FP001		172				
				11001	123759	172				
				OT#13	120107					
				ST512	122770	1652				
					123759	1652				

										DQA:	Da	ite: _	• •
NCR:	Yes / No				WORK ORDER NON-	COI	NFOR	MANCE / UPDATE					
										QA Closed:	Da	ite:	
Mark Ond	٠				DISPOSITION			AGA	INST DE	PARTMENT	/PROCESS		
Work Ord	er:				Rework	7		Skid-tube Cross	tubo	1	Water Jet		Engineering
Part N	No				Scrap	1	1 ,	Machining Smal		Pro	d. Eng. Coor.	\vdash	Quality
raiti					Use-as-is	1		~ —	hing	4	re/Packaging		Other
NCR I	No.				Work Order Update	1		Large Fab Compo	~⊢	1	Supplier	-	
						_				J			
Root				Descri	ption of work order update	T	Initial	Action		Sign &			
Cause	Date	Step	Qty	(or Non-conformance	Ch	nief Eng	Description		Date	Verificatio	n	QC Inspector
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Landi	ng Gear				General	_	,			-			
	Bending		,		Bend		Grain		<u> </u>	Ovalized			Pressure/Forced
	Centre No	ot Concer	ntric to	o/s	BOM/Route		Hardwa	re	<u> </u>	Over/Under	tolerance		Temperature/Cure
	Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorred	ct		Weld
	Crushed/	Crimped.			Burrs		Instruct	ions Incomplete/Unclear		Part Lost/Mi	ssing		Wrong Stock Pulled
	Cuffe				Contamination	1	Mainte	nance	I	Part Moved			

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

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December-19-12 1:20:37 PM

Work Order ID: 94628 D3391-021 Parent Item: Parent Item Name: Fwd Tube Assembly D3672-1 Phenolic Washer

Start Date: 12/31/12

Start Qty: 1.00

Required Date: 1/18/13 Required Qty: 1.00

11/0/70

Location	Loc Oty Loc Code	
FG	10 1399099	
85222	10	
GA	242	
85222	242	National Professional Confession
ST061	909	
83608	429	
91325	480	
ST062	527	
93886	527	
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AELS-1032-225 INSERT

Purchased

Manufactured

No

No

ALS4-1032-225

141177097

Each

NCR:	Yes	/ No				WORK ORDER NON-	CO	NFORM	MANCE / UF	PDATE				•
									•		QA Closed	d: Da	ate:	
Work Ord	er:					DISPOSITION	7			AGAINST D	EPARTMEN		_	, , , , ,
Part I	No	······································				Rework Scrap Use-as-is		1	Skid-tube Machining noforming	Crosstube Small Fab Finishing	4	Water Jet od. Eng. Coor. ore/Packaging		Engineering Quality Other
NCR I	No					Work Order Update	<u> </u>	I .	Large Fab	Composite	<u> </u>	Supplier		
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	lacksquare	rushed/C	crimped.			Burrs	L	-1	ions Incomplete,	/Unclear	Part Lost/N	_		Wrong Stock Pulled
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	$oldsymbol{oldsymbol{ o}}$	eat Treat				Countersink	\vdash	Mislabe		<u></u>	Positioned	-	_	1
	-		Strip in	Tube		Cut Too Short	L	Misread	I		Power Los	s/Surge	L	Other
	Ri	pples in	Bend			Drill Holes	L	Offset						
i i	I To	roug M	avoc in F	vtrucion		Drawing	1	Dut of C	alibration					

Out of Sequence

Outside Dimensions

Date: ____ • __

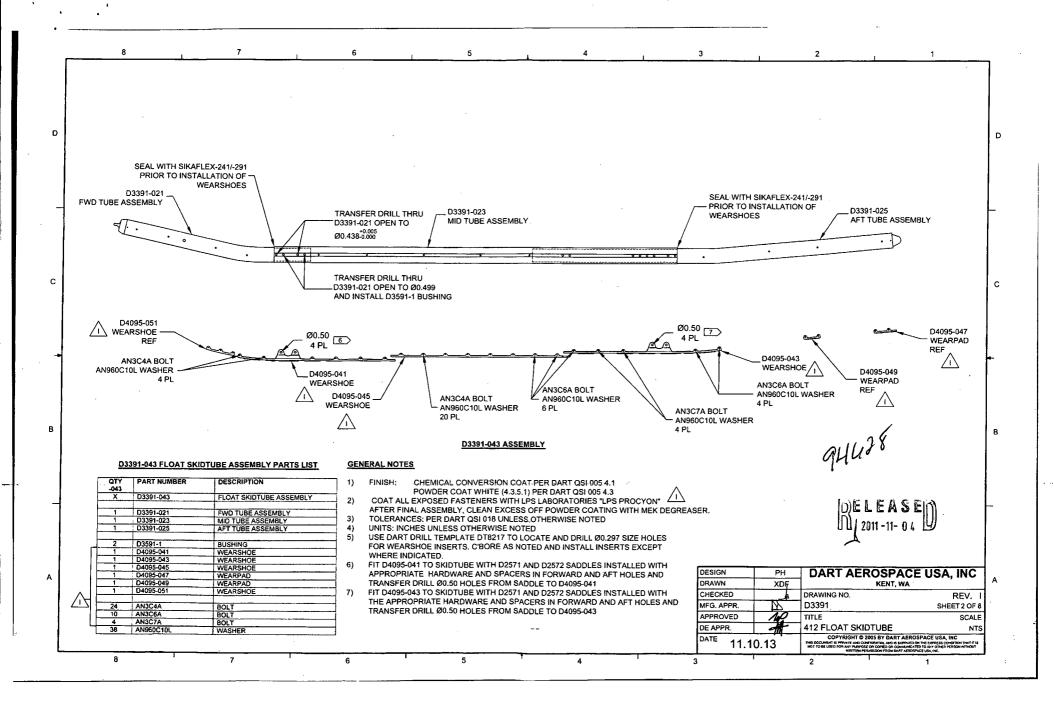
Turning Sequence

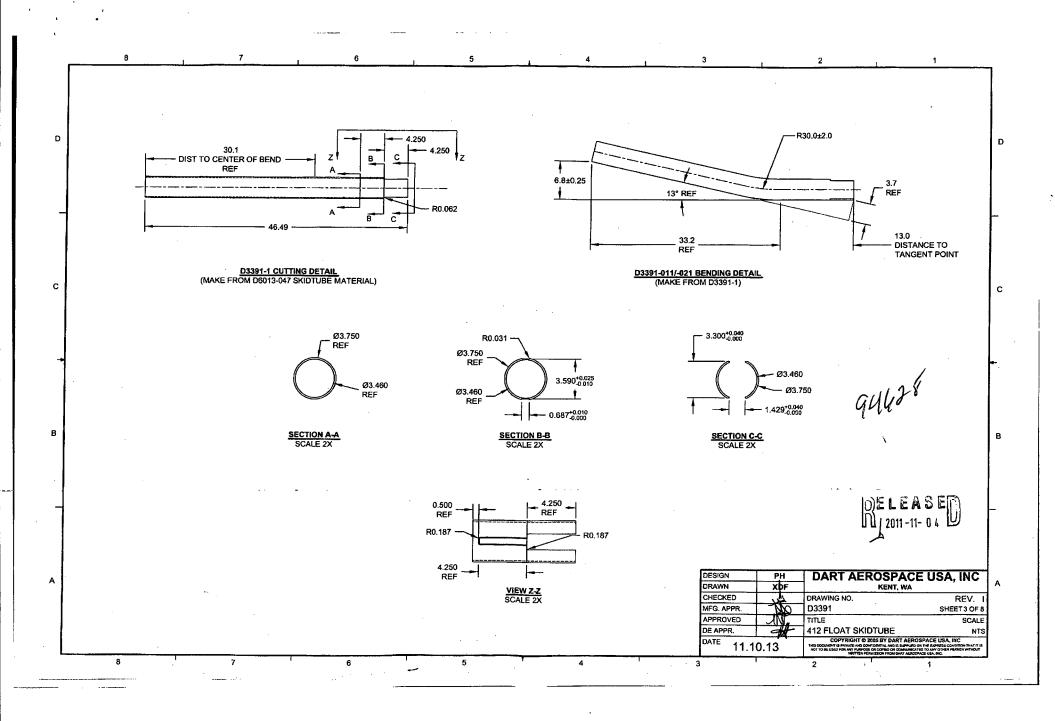
Wave/Twist in Tube

Finish

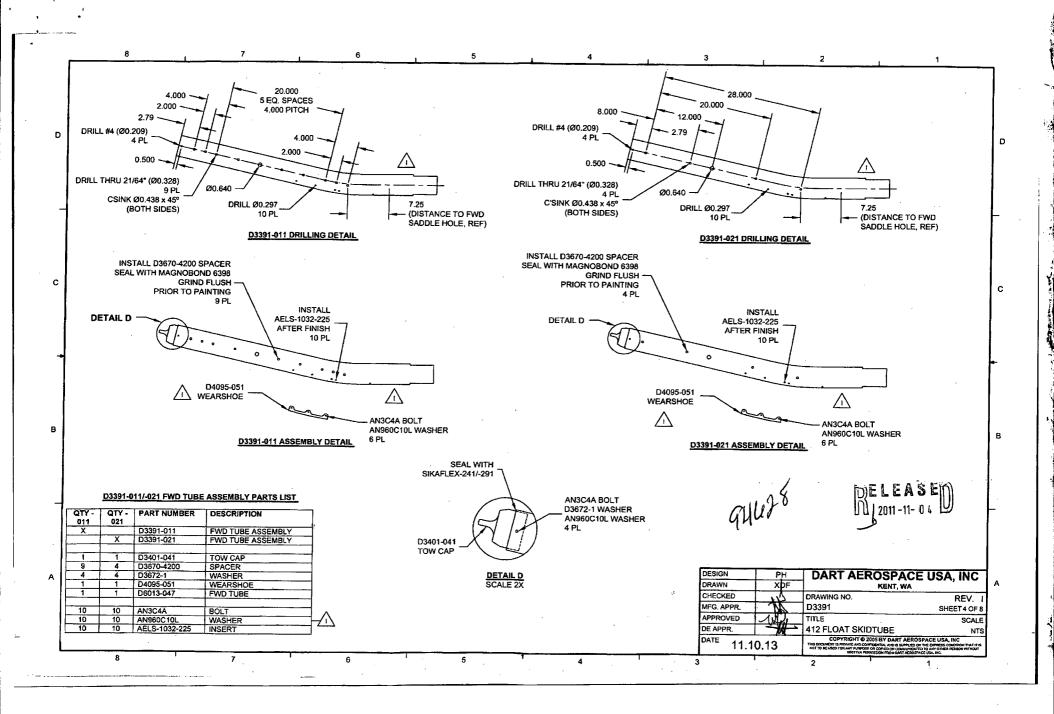
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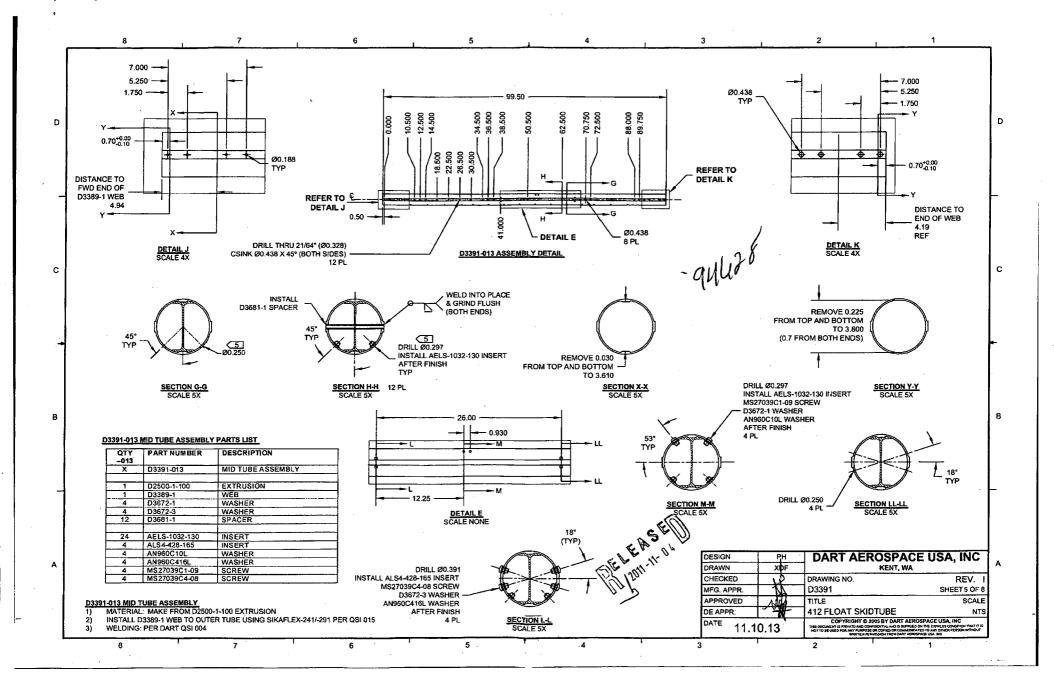
94428 pl 13-01-2 SEAL WITH SIKAFLEX-241/-291 PRIOR TO INSTALLATION OF WEARSHOES D3391-011 MS27039C4-12 SCREW SEAL WITH SIKAFLEX-241/-291 FWD TUBE ASSEMBLY D3672-3 WASHER PRIOR TO INSTALLATION OF D3391-013 AN960C416L WASHER D3391-015 TRANSFER DRILL THRU **WEARSHOES** D MID TUBE ASSEMBLY 4 PI AFT TUBE ASSEMBLY D3391-011 OPEN TO Ø0.438-0.000 5.000 TRANSFER DRILL THRU D3391-011 OPEN TO Ø0.499 AND INSTALL D3591-1 BUSHING Ø0.50 $\overline{2}$ D4095-043 4 PI WEARSHOE D4095-051 WEARSHOE Ø0.50 /ı\ D4095-047 6 REF WEARPAD REF AN3C4A BOLT (1) AN960C10L WASHER (1) С D4095-049 D4095-041 WEARPAD AN3C6A BOLT AN3C6A BOLT WEARSHOE AN3C4A BOLT (1) D4095-045 AN960C10L WASHER AN960C10L WASHER -AN960C10L WASHER (1) WEARSHOE 4 PL 6 PL AN3C7A BOLT Λ -AN960C10L WASHER 4 PL D3391-041 ASSEMBLY REMOVE GASKETS AND REPLACE ALL WEARSHOES; PARTS LIST UPDATE, ZN A8-1, ZN A8-2, ZN A6-4, ZN B6-8; LPS-3 COATING REMOVED FROM NOTE 2, ZN A3-1, ZN A3-2, REMOVED INSERT AELS-1032-130. XDF 11.10.13 ZN B6-4, B2-4, C7-8, C3-8; REMOVED HOLES, ZN D6-4 ZN D2-4, ZN D7-8, ZN D3-8 DRAWING UPDATED TO CURRENT STANDARDS. D3391-041 FLOAT SKIDTUBE ASSEMBLY PARTS LIST SHT 1 PL ADDED D3591-1 BUSHING, ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. В 08.08.20 SHT 2 PL ADDED D3591-1 BUSHING, ZN C6 Ø0.438 DIM В PART NUMBER OTY DESCRIPTION WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. -041 (FOR FURTHER INFO SEE DSI 9364 & NCR 08-074) FLOAT SKIDTUBE ASSEMBLY D3391-041 REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING D3391-011 G FWD TUBE ASSEMBLY DC 07.07.31 FLOAT BAGS, DWG REORGANIZED FOR CLARITY D3391-013 MID TUBE ASSEMBLY **GENERAL NOTES** D3391-015 AFT TUBE ASSEMBLY ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -011/-021 F PH 07.01.18 D3591-1 BUSHING FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 E CHANGE TOLERANCE, EASE MANUFACTURE PH 06.04.25 D3672-3 WASHER POWDER COAT WHITE (4.3.5.1) PER DART OSI 005 4.3 UPDATE TOLERANCE, CHANGE HOLE SIZE ___ PH 06.01.23 D4095-041 WEARSHOE COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" D4095-043 WEARSHO LENGTHEN AFT EXTENSION c AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER. PH 05.09.27 D4095-045 WEARSHOE TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED DRAWING UPDATES В РН 05.06.10 D4095-047 WEARPAD UNITS: INCHES UNLESS OTHERWISE NOTED 4) Α NEW ISSUE PН 05.02.07 D4095-049 WEARPAD 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES D4095-051 RÉV. DESCRIPTION BY DATE WEARSHOE FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT DESIGN PH DART AEROSPACE USA. INC WHERE INDICATED. AN3C4A DRAWN XDF FIT D4095-041 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH KENT, WA AN3C6A AN3C7A 10 BOLT APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND CHECKED DRAWING NO. BOLT WASHER REV. I 38 AN960C10I TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-041 MFG. APPR. D3391 SHEET 1 OF 8 MS27039C4-12 SCREW FIT D4095-043 TO SKIDTUBE WITH D2571 AND D2572 SADDLES INSTALLED WITH APPROVED TITLE SCALE AN960C416L WASHER THE APPROPRIATE HARDWARE AND SPACERS IN FORWARD AND AFT HOLES AND DE APPR. 412 FLOAT SKIDTUBE NTS TRANSFER DRILL Ø0.50 HOLES FROM SADDLE TO D4095-043 COPYRIGHT © 2005 BY DART AEROSPACE USA, INC. DATE 11.10.13 THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS COME NOT TO BE USED FOR MAY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PER WRITTLY PERMISSION FROM DART AEROSPACE USA, NO.

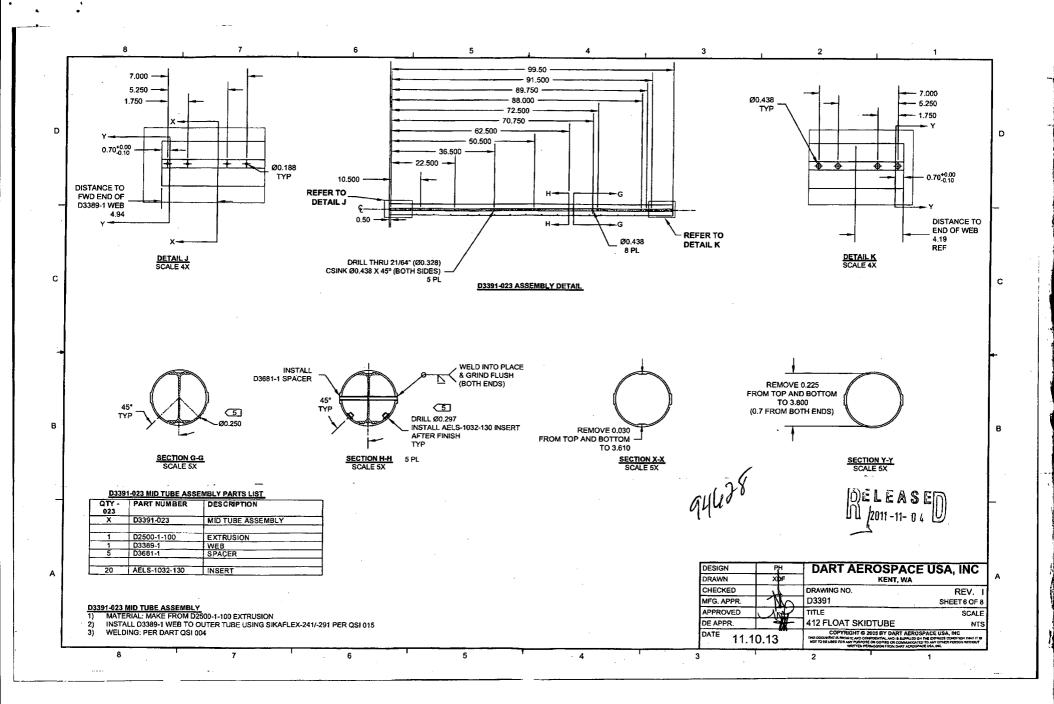




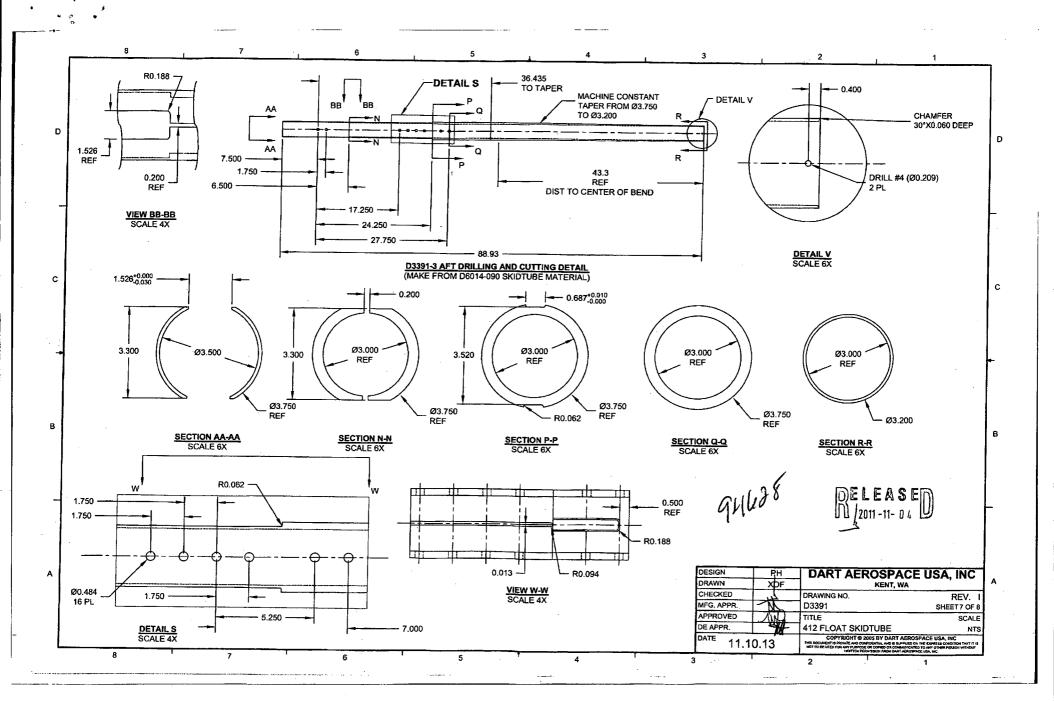
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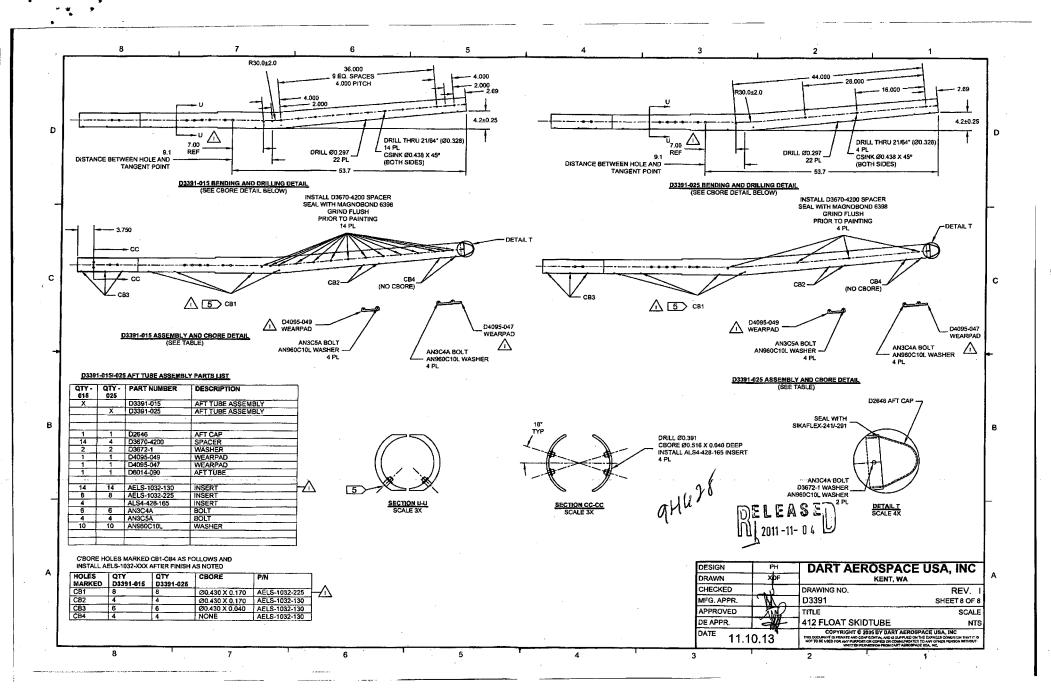






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DART AEROSPACE LTD

Work Order: +0+5+

Description: Float Skidtube (412)

Inspection Dwg: D3391 Rev: | Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

FIRST ARTICLE INST LOTION OT LOTION						
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.687	+0.010/-0.000	6691	/		5108	Vern
3.590	+0.025/-0.010	3.600			CNC.OZ	12" Vem
3.300	+0.040/-0.000	3.370	1			
1.429	+0.040/-0.060	1.425	1			
4.250	+/-0.010	4.250	/	•		
4.250	+/-0.010	4.250				
Q-500	+/-0.010					
,500	# 010	,503			Vem	RAPE
Ø, 1875	+.004	0.188			"(
		·				
• . /						
i	0.0		70	• \		

<u> </u>	0.0		- 25)		
Measured by:	1100	Audited by:	Daa	Preliminary Approval:	
Date:	13-010-79	Date:	17/07/22	Date:	
		L	17/2/		

3-7-7		8-7-74	Revised by Approved
Rev	Date	Change	
A	06.04.27	New Issue P/O D3391-011/-021	KJ/JLM
В	06.06.19	Tolerances revised per D3391 Rev. E	KJ/JLM
C	07.03.21	Dimensions removed per Dwg rev. F	KJ/JLM
D	07.11.23	Dwg Rev. updated	KJ/EC/DD
E	09.12.14	Dwg Rev updated	KJ
F	11.06.21	Dimension 0.500 added	KJ /
G	12.05.15	Dwg Rev updated	KJ SKJ

